PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW SPECIES OF PIPUNCULUS. [DIPTERA; PIPUNCULIDÆ.]

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The species described in the following were reared during investigations conducted by Prof. H. H. Severin from sugar-beet leaf-hoppers parasitised by the larvæ. They are briefly characterized herewith, in order that the names may be used in presenting the results of the investigations.

Pipunculus industrius new species.

Male.—Frons a narrow wedge extending about one-third the way to posterior eve-margin, silvery pollinose; ocellar triangle small and narrow, shining black. Face silvery pollinose, slightly broader than base of frons. Antennæ black, the third joint acuminate, its apex white and drawn out to a sharp point; arista black. Occiput shining black, finely shagreened; the sides silvery pollinose. Mesonotum black; shining and slightly shagreened on the disk, dusted with gray anteriorly, at the sides and in the prescutellar groove; humeral angles pale. Scutellum shining black; postnotum gray pruinose. Pleuræ black dusted with gray. Abdomen narrowed at base, swollen beyond; black dorsally, the posterior half shining and roughened, on the sides dusted with gray; first segment with the posterior half gray pollinose and with two or three stiff black bristles at the sides. Hypopygium large and broad, nearly symmetrical in dorsal view, broader and longer than the fifth segment, broadly rounded posteriorly, slightly angulate on the right side, a shallow impression on the middle of the posterior aspect; intermediate lobe visible on the right side as a large broad wedge. Legs black, the extreme apices of the femora, bases of the tibiæ broadly and apices more narrowly yellowish, the yellow more extensive on anterior pair; tarsi brown, darkened distally; hind trochanters unarmed, with sparse delicate hairs on under surface; hind tibiæ rather slender, on outer surface with a row of fine spines close to upper and lower margins; first tarsal joint somewhat thickened. Wings gravish hyaline, rather long; a long brown stigma, the distances between apices of auxiliary, first and second veins about equal; anterior cross-vein opposite end of auxiliary vein and at basal third of discal cell; last section of the fourth vein without stump and only slightly sinuate; apex of second vein distinctly beyond posterior cross-vein. Halteres with white stem and dark knob. Length: Body about 3 mm., wing 3 mm.

Female.—Frons narrow, parallel-sided, black posteriorly and with a median ridge extending beyond middle, the anterior third silvery-sericeous. Coloration of body and legs as in the male. Abdomen elongate-ovate, strongly gray pruinose on the sides. Ovipositor yellowish, short, a slender sharp blade extending to base of fifth segment, the fifth and sixth segments expanded beneath and with a deep median groove for the reception of the ovipositor. Length: Body about 2.5 mm., wing nearly 3 mm.

King City and Pleasanton, California, a series of males and females reared from *Eutettix tenella* by W. P. Hartung.

Type: Cat. No. 19,163, U. S. Nat. Mus.

Pipunculus vagabundus new species.

Male.—From a narrow wedge extending more than half-way to posterior eye-margin, silvery pollinose; ocellar triangle acute, black, separated from frons by a short contiguous eye-zone. Face silvery, as broad as base of frons. Antennæ black, the third joint abruptly acuminate. drawn out into a sharp point; arista black. Occiput black, shining, the sides silvery. Mesonotum black, subopaque on the disk, more shining at the sides; humeri silvery gray; pleuræ shining black. Scutellum black, shining; postnotum shining black. Abdomen longer than head and thorax together, subfusiform, broadest at apex of second segment: black throughout and without trace of pruinosity, dull basally, becoming shining upon the fifth segment and hypopygium, with scattered short black hairs at the sides. Hypopygium strongly asymmetrical, shorter than the fifth segment, in dorsal view the left portion depressed deeply, canaliculate and with oblique sinuate lateral margin, the thickened portion to the right with a deep apical indentation, the lobe on the right of which projects slightly beyond the general mass. Legs black, the extreme apices of the femora and the bases of the tibiæ yellowish; tarsi brownish yellow, the last joint tinged with black; hind trochanters unarmed; hind tibite subclayate and first joint of hind tarsi thickened. Wings rather short, broadly rounded at apex, hyaline, without stigma: anterior cross-vein about opposite apex of first vein and slightly before middle of discal cell; second vein terminating much before posterior cross-vein; last section of fourth vein without stump, sinuate, Halteres white, black at base. Length: Body about 3 mm., wing 2.8 mm.

Female.—Frontal stripe rather broad, slightly widened medianly, silvery pollinose, the ocellar triangle shining black. Occiput shining black in the middle, the sides silvery pruinose. Abdomen wholly black, shagreened, more shining posteriorly, the sixth segment highly polished.

